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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,012	09/09/2003	Stephen J. Miller	T-6012	3488

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CHEVRON CORPORATION
P.O. BOX 6006
SAN RAMON, CA 94583-0806

EXAMINER	
DOUGLAS, JOHN CHRISTOPHER	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
04/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/659,012	MILLER ET AL.	
	Examiner	Art Unit	
	JOHN C. DOUGLAS	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges the response filed on 1/09/2008 containing remarks and amendments to the claims. The rejection is maintained:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-3, 5, and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fragelli (US 6103101).

2. With respect to claims 1, 3 and 7-9, Fragelli discloses producing a bright stock from a feed comprising a hydrocracked residuum that contains 34 ppm of nitrogen and 0.91% sulfur that is subjected to hydroisomerization and hydrocracking that is subjected to a deep cut distillation at greater than 545 degrees C (1013 F) to produce a bright stock with a viscosity measured at 100 degrees C of 24.22 cSt having a viscosity index of 106 (see Fragelli, column6, lines 8-24, column 8, lines 28-39, column 10, lines 1-65, and Tables 1 and 2).

Fragelli does not disclose where the distillation occurs before the reaction zone. However, according to In re Burhans, 154 F.2d 690 (CCPA 1946), the selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results (see MPEP 2144.04 IV. C.). The placement of the distillation step after the reaction step instead of before the reaction step is a reversal in the order of the prior art process of Fragelli. Thus, it would have been obvious to perform the distillation step prior to the reaction step because such a change is simply a reversal in the order of process steps.

3. With respect to claim 2, Fragelli discloses where the feed can be a deasphalted oil (see Fragelli, column 2, lines 56-67).

4. With respect to claim 5, Fragelli discloses where a final bed of catalyst is a hydrofinishing catalyst (see Fragelli, column 8, lines 28-40).

5. With respect to claims 10-12, Fragelli discloses where a catalyst can be ZSM-23 (see Fragelli, column 2, lines 5-11).

6. With respect to claims 13-15, Fragelli discloses where the catalyst contains platinum (see Fragelli, column 7, lines 14-30).

7. Claims 4 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fragelli in view of Baker (US 5951848). Fragelli does not disclose a feed where the sulfur is less than 0.9 wt % and the nitrogen is less than 34 ppm.

However, Baker discloses feed to the isomerization zone with a nitrogen concentration of less than 0.5 ppm and a sulfur concentration of 7 ppm (see Baker, Table 2).

Baker discloses that the feed was upgraded by hydrocracking prior to dewaxing because high nitrogen and sulfur levels result in unacceptably low catalyst life (see Baker, column 7, lines 40-52 and column 10, lines 59-64).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the process of Miller to include feed to the isomerization zone with a nitrogen concentration of less than 0.5 ppm and a sulfur concentration of 7 ppm in order to preserve catalyst life.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fragelli in view of Miller (US 4657661). Fragelli does not disclose contacting the stabilized lubricant bright stock with clay in a clay treatment zone.

However, Miller discloses treating the bright stock with acidic clay (see Miller, column 5, lines 54-68).

Miller discloses that acidic clays are the preferred catalysts for further stabilizing the bright stock (see Miller, column 6, lines 3-19).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the process of Fragelli to include treating the bright stock with acidic clay in order to use the preferred catalyst for stabilizing bright stock.

Response to Arguments

Applicant first argues that the Fragelli reference does not solve the problem of making low haze catalytically isomerized oil and avoids catalytic isomerization of the 545 degrees C bottoms, as well as failing to recognize a benefit of cutting the distillation at 650 degrees C. However, Fragelli discloses subjecting the feed to hydrocracking followed by hydroisomerization that is subjected to a deep cut distillation at greater than 545 degrees C (which encompasses the narrower range of 1150 to 1300 degrees F), where a portion of this cut is recycled to mix with the feed and re-enter the hydrocracking and hydroisomerization zones (see Rejection of claim 1 and see Figure 1 of Fragelli). In response to applicant's argument that Fragelli does not solve the problem of making a low haze oil, the fact that ap

plicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the

differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant next argues that the claimed process only uses the light part (700-1200 degree F) part of the vacuum residuum, while Fragelli uses the whole vacuum residuum. However, since Fragelli processes the whole residuum, it would necessarily process the light part since light part falls within the boiling range of the whole residuum. Therefore, under MPEP 2144.05 I., the narrow claimed boiling range of the feed is prima facie obvious over the broad range of feed disclosed by Fragelli.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. DOUGLAS whose telephone number is (571)272-1087. The examiner can normally be reached on 7:30 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCD 4/12/2008
Examiner, Art Unit 1797

/Glenn A Caldarola/
Acting SPE of Art Unit 1797